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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,920	03/01/2002	Kiyoshi Chinzei	020276	7135

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ARMSTRONG, WESTERMAN & HATTORI, LLP
1725 K STREET, NW
SUITE 1000
WASHINGTON, DC 20006

EXAMINER

BEATTY, ROBERT B

ART UNIT	PAPER NUMBER
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2852

DATE MAILED: 08/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/084,920

Applicant(s)

CHINZEI, KIYOSHI

Examiner

Robert Beatty

Art Unit

2852

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-8 is/are allowed.
- 6) ☒ Claim(s) 1,9 and 11 is/are rejected.
- 7) ☒ Claim(s) 2,3,10 and 12-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Prior Art (Fig. 10) in view of Yoshiuchi et al.

Applicant's Fig. 10 teach an image forming apparatus comprising a photosensitive drum 81, a pair of scuff rollers 74 downstream from a transfer position, a tractor 77 upstream of the transfer position, and back-tension rollers 75 upstream of the tractor. Specifically, Applicant's Fig. 10 teach everything claimed except a speed controller that increases the speed of the back-tension rollers relative to the tractor speed during a period before image printing is begun.

Yoshiuchi et al. teach an image forming apparatus comprising a photosensitive drum 20, and a plurality of roller pairs TL, LL, HL, FL for feeding a recording medium to the photosensitive drum so as to receive an image. Before an image printing operation is begun, the recording medium is fed out and conveyed by the above mentioned rollers however the speed of the upstream rollers FL, HL, and LL is made higher than the speed of the downstream rollers TL such that a loop is formed in the paper before image printing is begun (col.12, lines 46-62). It would have been obvious to one of ordinary skill in the art at the time the invention was

made to modify Applicant's Fig. 10 such that the upstream recording medium conveyor such as the back-tension rollers is made higher than the downstream conveyor such as the tractor such that a loop is formed before a printing operation is started because the recording medium can be reliably cut as taught in Yoshiuchi et al. (col.4, lines 8-24).

2. Claims 9,11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Prior Art (Fig. 10) in view of Fujimoto et al.

Applicant's Fig. 10 teach an image forming apparatus comprising a photosensitive drum 81, a pair of scuff rollers 74 downstream from a transfer position, a tractor 77 upstream of the transfer position, and back-tension rollers 75 upstream of the tractor. Specifically, Applicant's Fig. 10 teach everything claimed except a speed controller that increases the pulling force of the scuff rollers relative to the back-tension rollers during a period before image printing is begun.

Fujimoto et al. teach an image forming apparatus comprising a photosensitive drum 11, a transfer device 17 at a transfer position, a tractor 12, located upstream of a transfer position, for conveying a recording medium, and scuff rollers 13 located downstream of the transfer position. As described in col.12, lines 23-54, the scuff rollers are operated at a faster speed (93 mm/s) relative to the tractor conveyor (89 mm/s). In addition, the scuff roller can be operated at a faster speed than the tractor conveyor after the image forming operation has begun

(col.13, lines 3-67) It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Applicant's scuff rollers to operate at a faster speed than the back-tension rollers because tension to the recording medium can be imparted which will improve image formation.

3. Claims 2-3,10,12-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. Claims 4-8 are allowable over the prior art of record.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sato et al., Ainoya, Yamamoto et al., Jackson, and Kramer all teach various speed controls for recording mediums in printing devices.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Beatty whose telephone number is 703-308-1372. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley, can be reached on (703) 308-1373. The fax

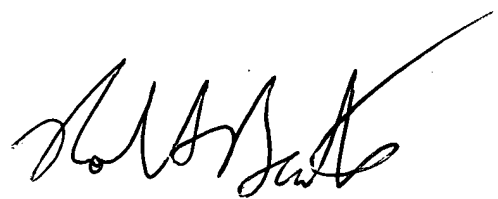
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phone number for the organization where this application or proceeding is assigned is 703-872-9318 (before final) and 703-872-9319 (after final).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.

A handwritten signature in black ink, appearing to read 'Robert Beatty', with a long, sweeping horizontal stroke extending to the right.

Robert Beatty
Primary Examiner
Art Unit 2852

July 28, 2003